TENDENCIES AND ASPECTS OF DEVELOPMENT OF INFORMATISATION OF AGRARIAN EDUCATION

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Abstract

In accordance with the Decree of the President of Ukraine 'On national doctrine of the education development' the priority of the education development is an application of modern informational communicative technologies which provide the further improvement of the educational complex, availability and efficiency of the education, preparation of the junior generation for the vital functions of the society. One of the ways to achieve the purpose in question is the providing of successive informatisation of development system, especially the agrarian system that is aimed at the satisfaction of the development, informational and communicative needs of the participants of the educational process.

Analysis of the research of the issue in question and the definition of the tasks

Lately in the pedagogical literature much attention is paid to the problems of the education informatisation. For example, the researches of A.I. Berg, O.P. Yershov, Y.I. Mashbytsya, V.M. Monakhova, O.K. Tykhomyrova are devoted to the problem of providing the appropriate level of the informational maintenance of the educational process; the influence of the modern technologies on the educational system was studied by V.E. Bykov, V.M. Bondarovska, N. Bunyayev,

B.S. Gershunskyy, Y.O. Doroshenko, M.I. Zhaldak, O.S. Ulkiv, A.M. Yasynskyy and others. However, the themes of the papers in the didactic aspect are connected with the secondary school or with training of the pedagogical specialist. Lately works that are devoted to the usage and study of computer technologies in university appeared, for example, the works of O.N. Berishvili, V.Y. Bykova, Y.O. Doroshenko,

H.O. Kozlakova, A.A. Korotchenkova and others. But there are few works that are devoted to informatisation of agrarian education. However, agrarian education deserves special attention, because it has specific peculiarities. Here they are:

1 Students start the 1st year course with rather a different level of school computer training. Most of them are school-leavers from village schools, even from the area centers, so they have a low or zero level of knowledge, skills, practice of the computer usage. Among school-leavers from city schools this percentage is also rather high and is up to 40%.
2 High agrarian educational institutions of the 3-4th levels of accreditation prepare bachelors, specialists, master in different fields (zoological, agronomical, processing, veterinarian, building, mechanization, electrification, economical, legal, financial etc.).
3 Lately informational-consulting service of agricultural and industrial production gets more development.
4 Summarize the above described peculiarities it is possible to make a conclusion, that the definition of the tendencies and perspectives of development of the agrarian education informatisation is relevant today. Without it the solution of the informatisation problems is not possible.

The main part

The analysis of the main conceptual and program-normative documents on the education informatisation , especially in the field of both the development and reforming of the educational process and receiving education in high agrarian educational institutions of Ukraine [1, 2, 6], to our mind, gives the reasons to think that in general it is possible to single out the following main directions that determine the notional and operational characteristics of the tendencies and predicted perspectives of informatisation of the agrarian education (see fig. 1).

***The first* direction**. It is the further intensification of the rationalization process of the fulfillment of the government contractual work as to the agrarian education on the basis of usage of computer engineering (CE), software (SW), program-methodical maintenance (PMM) and computer technologies (CT). The contents of the above named direction of the tendencies of the development of informatisation of the agrarian education for the perspective provides the further improvement of notional and operational contents of the course.

'Computer science and computer engineering' for making favorable preconditions of enlarging the amount of preparation of the specialists like researcher, teachers, prognosist-analysts, engineers, agronomists, programmers etc., in which on rather high general educational, special levels the informational culture (IC) of the usage of CE, SW, PMM, CT for the solution of the given tasks is formed. It also means, that the above mentioned features of student- graduates' computer training will be more represented in the contents of the normative educational-qualifying characteristics (EQC) of the graduates of the high agrarian educational institutions of Ukraine.

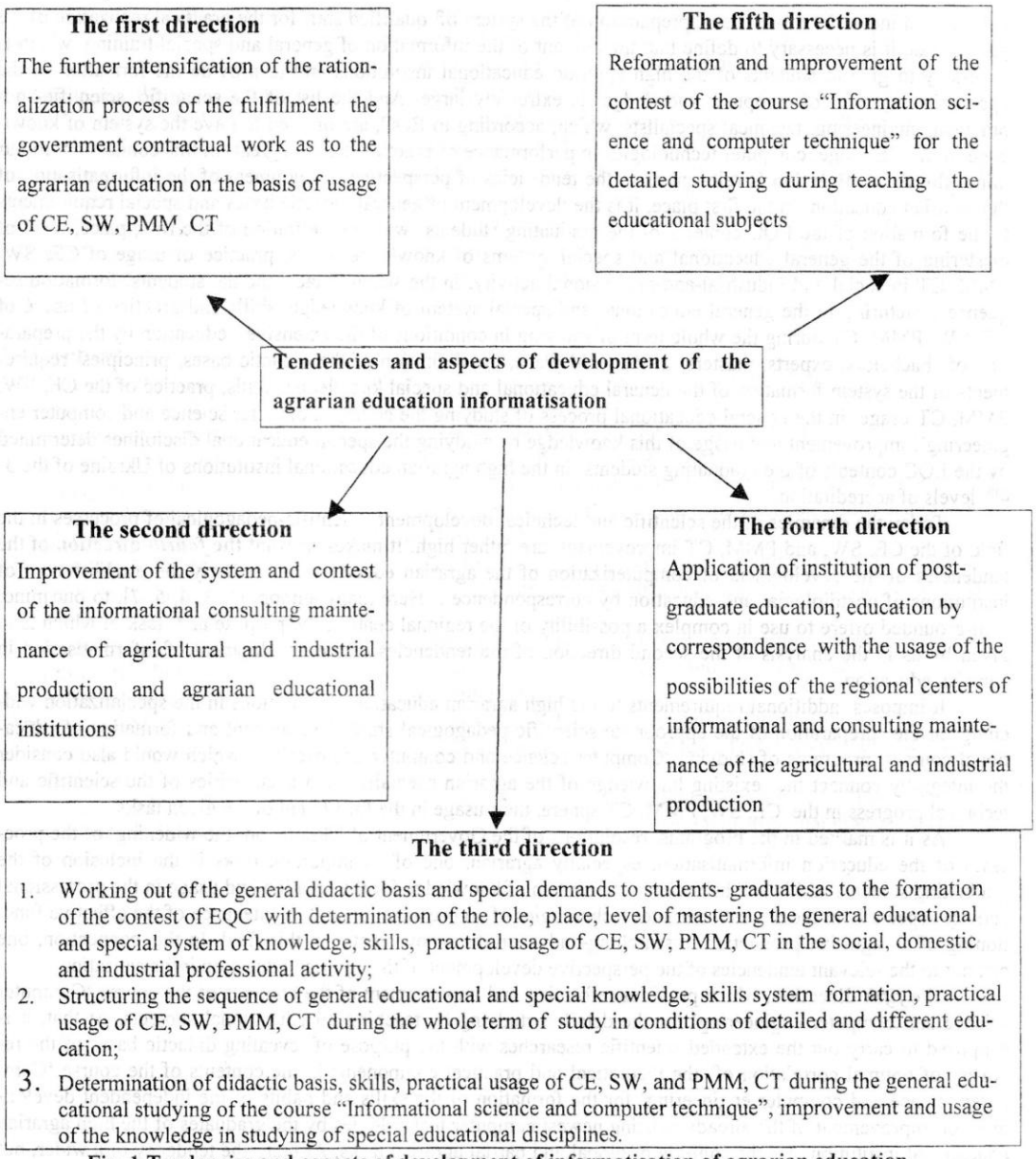

Fig. 1 Tendencies and aspects of development of informatisation of agrarian education

To ***the second*** **direction** it is possible to ascribe the tendencies of the wider usage of CE, SW, PMM, CT for the improvement of a network and contents of the informational-consulting maintenance of agricultural and industrial productions and agrarian educational institutions for the intensification and rationalization of management of in agriculture, which is a developed sphere of industry. In this connection to the perspective tendencies of informatisation of the agrarian education one can ascribe the formation of the system of the regional centers of an operative computer exchange and maintenance of the necessary information of all participants of the agrarian industrial and educational shere. The mentioned direction conforms to the tasks of the previous and indicates the perspective tendencies of the necessity of the appropriate improvement of the formation of the contents of the course 'Computer science and computer engineering' for the high agrarian educational institutions of Ukraine with the purpose of inclusion necessity of its notional, operational and active features in the high agrarian educational institutions preparing graduating students as agrarian specialists. Thus, the necessity of development of a telecommunication network of computer channels of information interchange between the above mentioned centers is defined as the perspective tendency of the informatization of the education of agrarian institutions.

Analyzing and summarizing the notional, operational and active characteristics of the basic components of the tendencies of the first and the second directions of the perspective development of informatisation of agri-

cultural and industrial productions, preparation of the system of qualified staff for the practical realization of the given tasks, it is necessary to define that the amount of the information of general and special training, which is necessary to give to students of the high agrarian educational institutions and to provide the formation of the appropriate system 'of computer knowledge' is extremely large. And the list of the scientific, scientific-and-practical, engineering, technical specialists, which, according to EQC, are obliged to have the system of knowledge of the CE usage, computer technologies in performance of practical tasks is great. In this connection, to our mind, **the third direction** is relevant as to the tendencies of perspective development of the informatisation of the agrarian education. In the first place, it is the development of general didactic bases and special requirements to the formation of the EQC contents of the graduating students with the definition of the role, place, level of mastering of the general educational and special systems of knowledge, skills, practice of usage of CE, SW, PMM, CT in social and industrial-and-professional activity; in the second place, the the students' formation sequence structuring in the general educational and special system of knowledge, skills and practice of usage of CE, SW, PMM, CT during the whole term of studying in conditions of the extensive education by the preparation of bachelors, experts, masters; in the third place, the definition of the didactic bases, principles, requirements of the system formation of the general educational and special knowledge, skills, practice of the CE, SW, PMM, CT usage in the general educational process of studying the course 'Computer science and computer engineering', improvement and usage of this knowledge by studying the special educational disciplines determined by the EQC contents of the graduating students in the high agrarian educational institutions of Ukraine of the 3-4th levels of accreditation.

Today the dinamics of the scientific and technical development, scientific-pedagogical of processes in the field of the CE, SW, and PMM, CT improvement are rather high. It makes relevant **the *fourth* direction** of the tendencies of the development of computerization of the agrarian education, particularly the establishment of institutions of postdiploma and education by correspondence . Here many authors [1, 3, 4, 5, 7], to our mind, well-grounded offere to use in complex a possibility of the regional centers, the purpose and task of which is to given by us in the analysis of the second direction of the tendencies of the development of informatisation in agrarian education.

It imposes additional requirements to the high agrarian educational institutions in the specialization widening at the preparation of the appropriate scientific pedagogical staff, development and formation of educational courses, programs of studying 'Computer science and computer engineering', which would also consider the integrally connect the existing knowledge of the agrarian specialists and peculiarities of the scientific and technical progress in the CE, SW, PMM, CT sphere, their usage in the fulfillment of the given tasks.

As it is marked in the programs, resolutions of the Government of Ukraine on the widening of the processes of the education informatisation, especially agrarian, one of its important tasks is the inclusion of the graduating students' skills and habits into the system of knowledge for the creation and usage in the professional activity especially in the newest computer technologies of an organization and maintenance of the effective functioning of an agrarian production, researching-and-scientific acievements in this field. In this connection, one can put to the relevant tendencies of the perspective development of the agrarian education informatisation

the *fifth* direction, which provides reforming and improvement of the contents of the course 'Computer science and computer engineering' for the detailed studying by teaching all educational subjects. At that, it is supposed to carry out the extended scientific researches with the purpose of revealing didactic bases of the recovery of optimal correlation of the theoretical and practical components in the contents of the course 'Computer science and computer engineering' for the formation of the skills and habits of the independent development or improvement of the already existing newest computer technologies by the graduates of the high agrarian educational institutions for the solution of global and partial agrarian tasks. At that, the tendency of a wider, but differential inclusion of the theoretical and practical statements of the computer science into the contents of the course 'Computer science and computer engineering' in the preparation of the bachelors, specialists, masters of agrarian sciences. But each content of the course 'Computer science and computer engineering' for the bachelors, specialists, masters should have the precisely formed final results, purposes, tasks, mastering and achievement of which provide the graduate effective fulfillment of theoretical and practical tasks with the usage of the computer technologies, caused by the sphere and normative rules of the work in the chosen speciality.

Conclusions and perspectives of the further researches

Summazing the analysis of the above mentioned perspective directions of the informatisation of agrarian education in high agrarian educational institutions, it is necessary to mention the tendency to strengthe the magnitude of the studying of the course 'Computer science and computer engineering'. It is defined as the main formation component of the general educational and special knowledge, skills and habits, the CE, SW, PMM, CT usage on one hand, for the increasing of efficiency of studying the educational disciplines in high agrarian educational institutions and on the other hand, as a basis for the usage of the newest computer technologies in the future profession. At this, the tendencies of the detailed studying of the course 'Computer science and computer engineering' as a separate discipline in all educational courses are observed at the preparation of the bachelor,

specialists, masters. But it is necessary to note, that the inclusion into the contents of the course 'Computer science and computer engineering' of the theoretical and practical components, which can be used by studying of the separate educational disciplines, is a little bit unexplored and not fully investigated problem. To our mind, on the one hand, the given difficulties arise in insufficient professional preparation of the teachers-theoretics in theoretical-and-applied shere of usage of the newest computer technologies by the solution of educational tasks of studying of computer discipline. On the other hand, similar difficulties, but quite the opposite, are observed by the teachers of the course 'Computer science and computer engineering' in the usage of the theoretical-and-applied rules of the course by studying the special disciplines. To our mind, with time, improving the level of teachers' computer preparation of the high agrarian educational institutions, the course 'Computer science and computer engineering' as the independent subject will be studied in complex at the formation the general educational knowledge system, skills, practice of the computer technologies usage in studying of separate disciplines and solutions of tasks, which are connected with the future profession.

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